Tentative line length — about 170 Km.

5. MoU signed with North-East Power Transmission Company (Private) Ltd. for dedicated transmission system associated with 740 MW Gas Based Project in Tripura.

Estimated Cost — Rs. 1500 Crore approx.

Tentative line length — about 650 Km.

Allocation of funds for R&D

1433. SHRI V. NARAYANASAMY: Will the Minister of POWER be pleased to state:

(a) whether it is a fact that Government are investing very meager amount in the energy sector for Research and Development in the Coal based energy; and

(b) whether Government have any proposal to increase the allocation for R&D in coal based power generation?

THE MINISTER OF POWER (SHRI SUSHILKUMAR SHINDE): (a) and (b) Major public sector undertakings like Bharat Heavy Electricals Limited (BHEL) and NTPC Ltd. are investing in R&D in coal based energy. Central Power Research Institute (CPRI), an autonomous body under the Ministry of Power is also undertaking R&D in coal-based power.

BHEL (under the Ministry of Heavy Industries and Public Enterprises) has major portion of its operations in the coal based energy sector and is currently spending the largest amount on Research and Development as compared to any other similar Indian company operating in BHEL's sector of operations. The Research and Development expenditure of BHEL during the year 2005-06 was Rs. 151.70 crores and the expenditure for the year 2006-07 is expected to be around Rs. 160 crores. The targeted expenditure for the year 2007-08 is Rs. 180 crores.

NTPC has decided to set aside 0.5% of its net profit annually for Research and Development activities. It has also recently set up an Energy Technologies Centre which will work in both fundamental and applied research and would develop technologies through collaborative research with the best of the R&D and academic institutions in India. NTPC has

entered into research collaborations with eight leading research institutes for twelve research projects in areas of efficiency and environment with respect to power generation, to be completed over a time period of 18 to 48 months at a cost of Rs. 8 crores.

Central Power Research Institute (CPRI) is undertaking R&D in coal based power in the following areas:

* Coal blending & beneficiation
* Coal-based boiler heat rate improvement and analysis
* Diagnostic techniques and RLA
* Flue gas analysis for constituents like Sox, NOx and CO

In view of the high ash content of Indian coal, fly ash to the tune of about 110 million tonnes per annum is being generated from the coal-based power stations. With a view to encourage and facilitate greater utilization of fly ash and its derivatives, and in an environment-friendly manner through development of value added products, CPRI has recently established a Centre for Industrial Solid Waste Utilization (CISWU) in Bangalore at a cost of Rs. 4.30 crores.

The Working Group on Power for 11th Five Year Plan of this Ministry has recommended an allocation of Rs. 1213.5 crores for R&D in power sector during the 11th Five Year Plan out of which an amount of Rs. 93 crores is to be earmarked for R&D in coal-based power generation.

Power capacity addition

1434. SHRIMATI SYEDA ANWARA TAIMUR:
SHRI VIJAY J. DARDA:

Will the Minister of POWER be pleased to state:

(a) whether it is a fact that 1,00,000 MW capacity addition till 2012 will suffice to meet the increasing requirements of power to all;

(b) whether the 70,000 MW require during Eleventh Five Year Plan period to meet the targeted economic growth rate of 9 per cent would be possible keeping in view the paucity of resources, and the past experience during the Ninth and Tenth Five Year Plans;